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In the Claims:

Claims 1 to 24 (Canceled).

1 25. (Currently amended) A semi-fabricated intermediate article
2 for producing a composite material, comprising a plurality
3 of discs (10) that each respectively comprise a matrix
4 material and that are arranged as a loose stack of said
5 discs which are not yet joined to one another, each said
6 disc (10) in said stack further comprising: a radially
7 inner opening (11) surrounded by an inner disc edge and a
8 disc ring portion surrounding said inner opening and
9 surrounded by an outer disc edge, said disc ring portion
10 comprising a groove (13) and at least one reinforcing fiber
11 (14) embedded in said groove (13) with said matrix material
12 surrounding and consolidated around said at least one
13 reinforcing fiber in said groove, thereby forming a fiber
14 reinforced disc ring section, said reinforcing fiber (14)
15 and said groove (13) being spaced radially outwardly from
16 said inner disc edge thereby forming an inner first disc
17 ring section free of reinforcing fiber, said reinforcing
18 fiber (14) and said groove (13) being spaced radially
19 inwardly from said outer disc edge thereby forming an outer
20 second disc ring section free of reinforcing fiber, said
21 fiber reinforced disc ring section being positioned between
22 said first and second disc ring sections free of
23 reinforcing fiber.

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1 26. (Currently amended) The semi-fabricated intermediate
2 article for producing the composite material of claim 25,
3 wherein said first disc ring section free of reinforcing
4 fiber comprises a first radial width that is the same in
5 each disc in said stack, and wherein said second disc ring
6 section has a second radial width that differs in different
7 discs in said stack.

1 27. (Currently amended) The semi-fabricated intermediate
2 article for producing the composite material of claim 25,
3 wherein said groove in each disc in said stack has a spiral
4 shape so that said at least one reinforcing fiber (14)
5 ~~or fibers extend~~ extends spirally inside said fiber
6 reinforced disc ring section.

1 28. (Currently amended) The semi-fabricated intermediate
2 article for producing the composite material of claim 26,
3 wherein said second radial width that differs in different
4 discs is individually adapted for each disc in said stack.

1 29. (Currently amended) The semi-fabricated intermediate
2 article for producing the composite material of claim 25,
3 wherein said matrix material comprises titanium or a
4 titanium alloy, and said at least one reinforcing fiber
5 comprises a silicon carbide fiber in each said disc in said
6 stack.

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1 30. (Currently amended) The semi-fabricated intermediate
2 article for producing the composite material of claim 26,
3 wherein said second disc ring section free of reinforcing
4 fiber in one disc in said stack is overlapped by at least
5 one fiber reinforced disc ring section of at least one
6 neighboring disc in said stack at an interface between said
7 fiber reinforced disc ring section and said second disc
8 ring section free of reinforcing fiber.

1 31. (Currently amended) The semi-fabricated intermediate
2 article for producing the composite material of claim 25,
3 wherein said ~~groove or~~ grooves in neighboring discs of said
4 stack are radially displaced relative to each other so that
5 said at least one reinforcing fiber in ~~said groove or~~
6 ~~grooves~~ in a given disc is radially staggered relative to
7 respective reinforcing fibers in neighboring discs in said
8 stack.

1 32. (Withdrawn - currently amended) A method of processing the
2 semi-fabricated intermediate article for producing the
3 composite material of claim 25, said method comprising the
4 steps:
5 a) providing said plurality of said discs (10) of said
6 matrix material,

- 7 b) forming at least one said groove (13) in each disc of
8 a number of discs in said plurality of discs (10),
9 c) inserting said at least one reinforcing fiber (14) in
10 each said groove (13) of a respective disc of said
11 number of discs,
12 d) consolidating each said disc with said at least one
13 reinforcing fiber (14) in said groove (13) thereof
14 respectively so [[that]] as to form a consolidated
15 disc in which said at least one reinforcing fiber (14)
16 is surrounded on all sides and embedded in said matrix
17 material,
18 e) stacking said consolidated discs to form said loose
19 stack as said semi-fabricated intermediate article,
20 and
21 f) joining each said disc in said stack to a neighboring
22 said disc or discs in said stack to form a solid stack
23 as said composite material.

- 1 33. (Withdrawn) The method of claim 32, further comprising
2 performing said step of providing by producing said
3 plurality of discs (10) with said radially inner opening
4 (11) surrounded by said inner disc edge, forming said at
5 least one groove in said fiber reinforced disc ring section
6 with a first spacing from said inner disc edge, and forming
7 said at least one groove in said fiber reinforced disc ring
8 section with a second spacing from said outer disc edge of
9 said disc (10) whereby said first disc ring section free of

reinforcing fiber is formed radially inwardly of said groove (13) and said second disc ring section free of reinforcing fiber is formed radially outwardly of said groove, so that said fiber reinforced disc ring section with said at least one groove (13) therein is positioned between said first and second disc ring sections free of reinforcing fiber.

34. (Withdrawn) The method of claim 32, further comprising performing said step of forming by making said groove (13) to a depth, in an axial direction, larger than a diameter of said at least one reinforcing fiber (14) so that lands (15) project above said at least one reinforcing fiber (14) inserted in said groove.

35. (Withdrawn) The method of claim 32, further comprising performing said step of consolidating each said disc (10) with said at least one reinforcing fiber (14) in said groove (13) thereof by exposing said disc to a superplastic deformation so that said fiber is enclosed on all sides by said matrix material.

36. (Withdrawn) The method of claim 33, wherein said step of stacking is performed so that each said radially inner opening (11) of each said disc in said stack is axially aligned with all other said radially inner openings to thereby form a hollow cylinder.

Claim 37 (Canceled).

1 38. (Withdrawn - currently amended)) The method of claim 32,
2 wherein said step of joining is performed as a diffusion
3 welding of ~~stacked~~ said discs (10) to form said solid
4 stack.

1 39. (Withdrawn - currently amended) The method of claim 32,
2 further comprising inspecting each said disc, following
3 said consolidating step and before said stacking step, for
4 any breaks in said at least one reinforcing fiber ~~or fibers~~
5 and for any cracks in said matrix material, and discarding
6 any said disc in which a break or a crack is discovered.

1 40. (Currently amended) A composite material article comprising
2 a plurality of annular ring-shaped composite discs arranged
3 axially aligned with one another and stacked successively
4 to form a stack of said discs, wherein:
5 each respective disc of said plurality of composite
6 discs respectively comprises an annular ring of a matrix
7 material including an inner ring portion bounding a central
8 axial hole of said disc, an outer ring portion bounded by
9 an outer periphery of said disc, and an intermediate ring
10 portion between said inner and outer ring portions;

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11 each said respective disc respectively further
12 comprises at least one reinforcing fiber that extends in a
13 direction around said central hole in said intermediate
14 ring portion, and said outer ring portion of said matrix
15 material does not include said at least one reinforcing
16 fiber therein; and

17 each said respective disc is respectively bounded by
18 first and second annular surfaces, and said at least one
19 reinforcing fiber is embedded in and surrounded by said
20 matrix material that is consolidated around said at least
21 one reinforcing fiber, so that said at least one
22 reinforcing fiber is located between and axially displaced
23 inwardly away from said first and second annular surfaces,
24 in that as results from a fabrication process in which a
25 groove deeper than a diameter of said at least one
26 reinforcing fiber was provided in said matrix material of
27 said intermediate ring portion of said respective disc,
28 said at least one reinforcing fiber was disposed in said
29 groove of said respective disc, and said ~~matrix material~~
30 respective disc was consolidated ~~and deformed~~ so as to
31 deform said matrix material thereof to close said groove
32 around said at least one reinforcing fiber.

1 41. (Previously presented) The composite material article
2 according to claim 40, wherein said discs are loosely
3 stacked on one another in said stack and are not yet joined
4 to one another.

1 42. (Currently amended) The composite material article
2 according to claim 40, wherein said discs are joined to one
3 another in said stack by diffusion ~~welding~~ weld joints
4 along said annular surfaces of successive neighboring ones
5 of said discs.

1 43. (Currently amended) The composite material article
2 according to claim 40, wherein said intermediate ring
3 portions containing said reinforcing fibers of at least
4 four successive neighboring ones of said discs in said
5 stack have successive alternating larger and smaller outer
6 diameters relative to one another so as to form a
7 crenelated intermeshing between said outer ring portions
8 and said intermediate ring portions of said at least four
9 successive neighboring discs.

1 44. (Previously presented) The composite material article
2 according to claim 40, wherein said groove and said at
3 least one reinforcing fiber extend along a spiral path
4 around said central hole.

1 45. (New) The semi-fabricated intermediate article for
2 producing the composite material of claim 25, wherein said
3 grooves in at least four successive neighboring ones of
4 said discs in said stack respectively extend to two
5 different outward radial dimensions in alternating
6 succession in said at least four successive neighboring

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7 disks, so that said second disc ring sections free of
8 reinforcing fiber in said at least four successive
9 neighboring disks intermesh with said fiber reinforced disc
10 ring sections having said at least one groove therein in
11 said at least four successive neighboring disks.

1 46. (New) A composite material comprising a plurality of discs
2 (10) that each respectively comprise a matrix material and
3 that are arranged as a stack, each said disc (10) in said
4 stack further comprising: a radially inner opening (11)
5 surrounded by an inner disc edge and a disc ring portion
6 surrounding said inner opening and surrounded by an outer
7 disc edge, said disc ring portion comprising a groove (13)
8 and at least one reinforcing fiber (14) in said groove (13)
9 thereby forming a fiber reinforced disc ring section, said
10 reinforcing fiber (14) and said groove (13) being spaced
11 radially outwardly from said inner disc edge thereby
12 forming an inner first disc ring section free of
13 reinforcing fiber, said reinforcing fiber (14) and said
14 groove (13) being spaced radially inwardly from said outer
15 disc edge thereby forming an outer second disc ring section
16 free of reinforcing fiber, said fiber reinforced disc ring
17 section being positioned between said first and second disc
18 ring sections free of reinforcing fiber, wherein said
19 grooves in at least four successive neighboring ones of
20 said discs in said stack respectively extend to two
21 different outward radial dimensions in alternating
22 succession in said at least four successive neighboring

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23 disks, so that said second disc ring sections free of
24 reinforcing fiber in said at least four successive
25 neighboring disks intermesh with said fiber reinforced disc
26 ring sections having said at least one groove therein in
27 said at least four successive neighboring disks.

[RESPONSE CONTINUES ON NEXT PAGE]

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